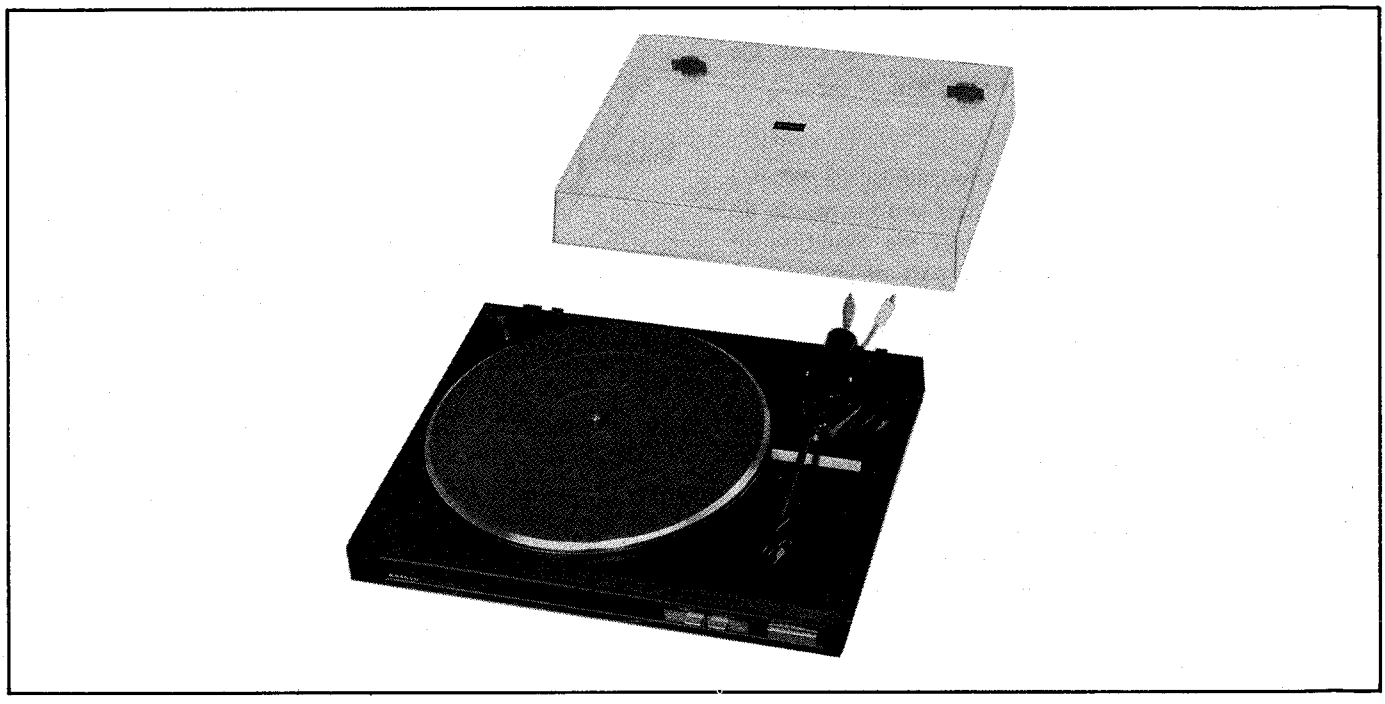
SERVICE MANUAL

STEREO TURNTABLE

SANYO

TP 477 (BLACK) (EUROPE)
TP 475 (BLACK) (CANADA)
TP 675 (BLACK) (CANADA)
TP 877 (BLACK) (CANADA)



SPECIFICATIONS

Motor:	DC servo motor
Drive system:	Belt drive
Speed:	33-1/3 and 45 rpm
Wow and flutter:	0.05% (WRMS)
Rumble:	–60 dB (DIN B spec)
Turntable platter:	11-13/16" (300mm)
Tone arm:	Static-balance straight type
Cartridge and stylus:	Magnetic stereo cartridge (VM type) (No. MG-44J) and 0.6 mil diamond stylus (No. ST-44J)
Stylus pressure:	1.25 g
Frequency response:	20 - 20,000 Hz
Channel separation:	20 dB
Power requirements:	DC: 12V, 100mA (TP674CN/USA.....from JA674) (TP475, TP675, TP877 .....from JA475, JA675, JA877) AC: 110/220V, 50Hz (TP477)
Demensions (W x D x H):	Approx. 420 x 355 x 106mm (16-1/2" x 14" x 4-3/16")
Weight:	Approx. 3 kg (6 lbs. 10 ozs.)

AUTO-RETURN ADJUSTMENT

When the distance between the center of center shaft and the needle tip becomes 64 $^{+1}_{-0.1}$ mm, **the outer periphery of pawl of pinion should begin to touch the claw of engagement lever.**

METHOD OF ADJUSTMENT

(1) Preparation

After removing the turntable, etc. and pressing the lower trip lever in the dirction of arrow, take the arm towrd the center shaft to let the rip lever push the lower trip bracket, move the arm slowly.

(2) Adjustment

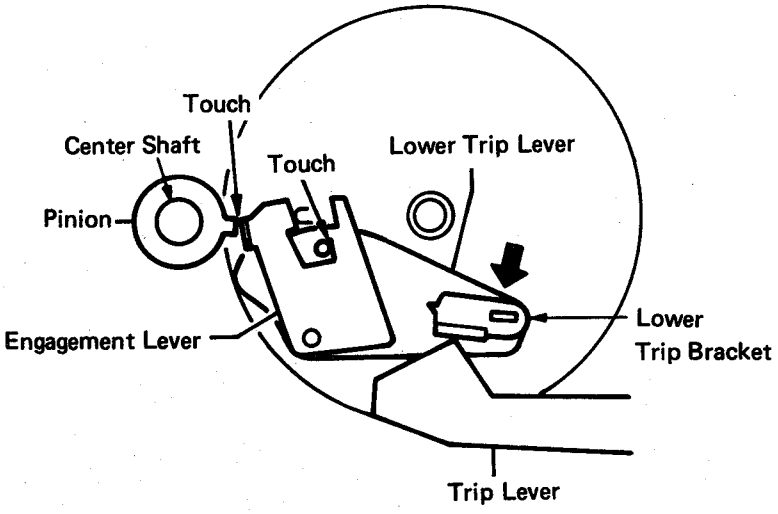
According to the following method, adjust the distance between the center of center shaft and the needle tip to the aforementioned range under the condition (of the above figure) that the claw part of engagement lever touches the pawl outer periphery of pinion when the lower trip lever and engagement lever move as pushed by the trip lever.

Method

Insert a blade screwdriver into the concave part of lower trip lever bracket, and turn the screwdriver to adjust the said distance. If turned clockwise, a position at a start of contact delays by about 0.72 mm at a time per 1ϕ ; if turned counterclockwise, it advances by the same rate.

(3) Confirmation

Confirm of your auto-return mechanism (RG652/ RG653) as based on the Product Specifications.



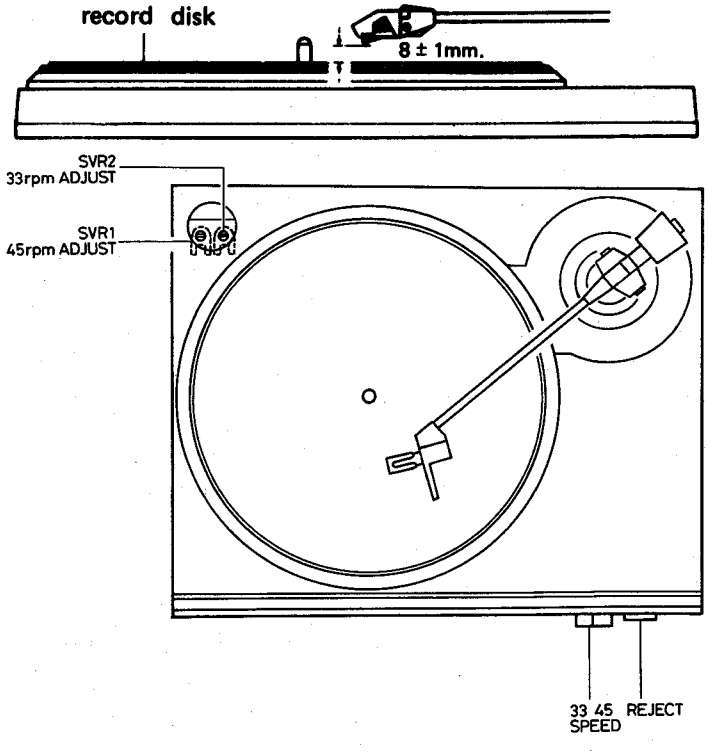
ADJUSTMENT OF STYLUS HEIGHT

Setting the record disk in place, raise the tonearm lift lever.

Bring the tonearm to above the disk, and insert a screwdriver into the "stylus height adjust" hole (see drawing for ADJUSTMENT OF AUTO-RETURN) and turn it right or left until the distance between the disk and stylus becomes 8 ± 1mm.

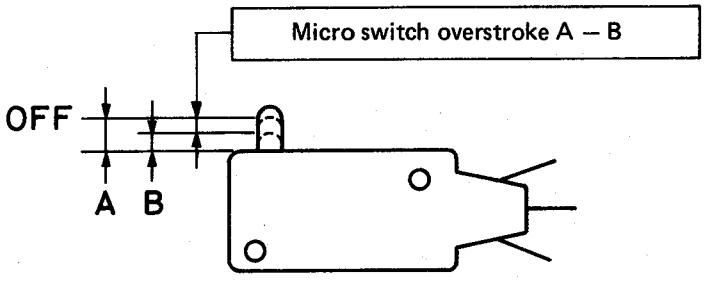
ADJUSTMENT OF TURNTABLE SPEED

Play a wow flutter checking record, and adjust by turning SVR1 (45 rpm) and SVR2 (33 rpm) so as to obtain the specified frequency.



IE. MICROSWITCH (FOR NEW LAMP/MOTOR) OVERSTROKE

Microswitch overstroke Specification (actuator area) Should be longer than 0.6 mm



A: Distance between the microswitch actuator tip and the microswitch frame when the neon lamp or motor becomes OFF in course of returning the arm to the rest side from the shaft side.

B: Distance between the microswitch actuator tip and the microswitch frame when the arm returns to the rest side.

As a roungh standard, confirm that the dimension B has become 0.6 ~ 0.9 mm.

Incidentally, the overstroke should meet the specification for both the neon lamp side and the motor side.

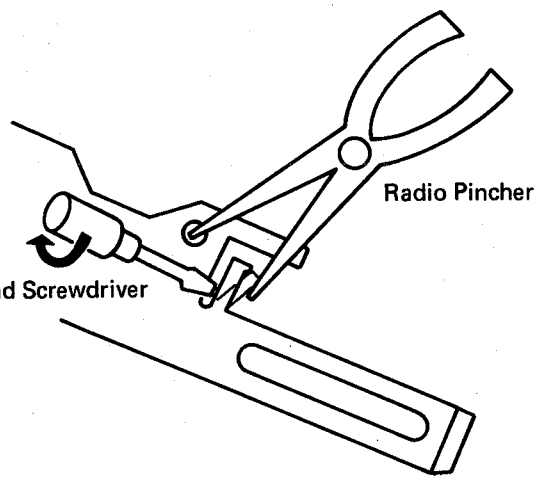
Method of Adjustment

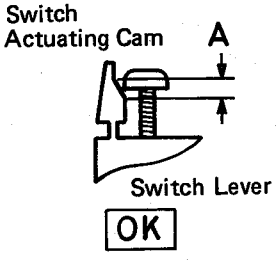
Adjust the microswitch overstroke according to the following procedure:

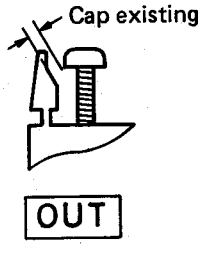
1) In the case where the microswitch overstroke is less than 0.6 mm when the arm is returned to the rest-Insert a blade screwdriver into the slit of main slide as shown in the figure at right, turn the screwdriver clockwise to adjust the microswitch overstroke so that it meets the specification.

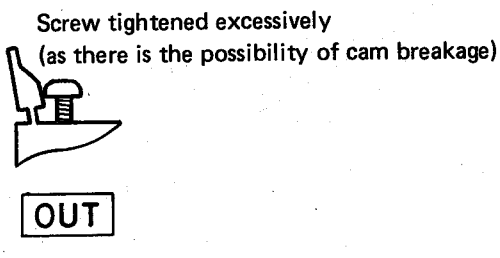
2) In the case where the microswitch is pushed excessively as shown in the figure at upper right, adjust for this by bending the pawl of main slide from the position of broken line to the direction of solide line.

3) Adjustment of push stroke of the upper side switch of two-throw switch
Adjust the push stroke by tightening the arm lever two-throw switch adjust screw to meet the aforementioned specification, provided that contacting of the adjust screw head with the switch actuating cam should be within the range A.

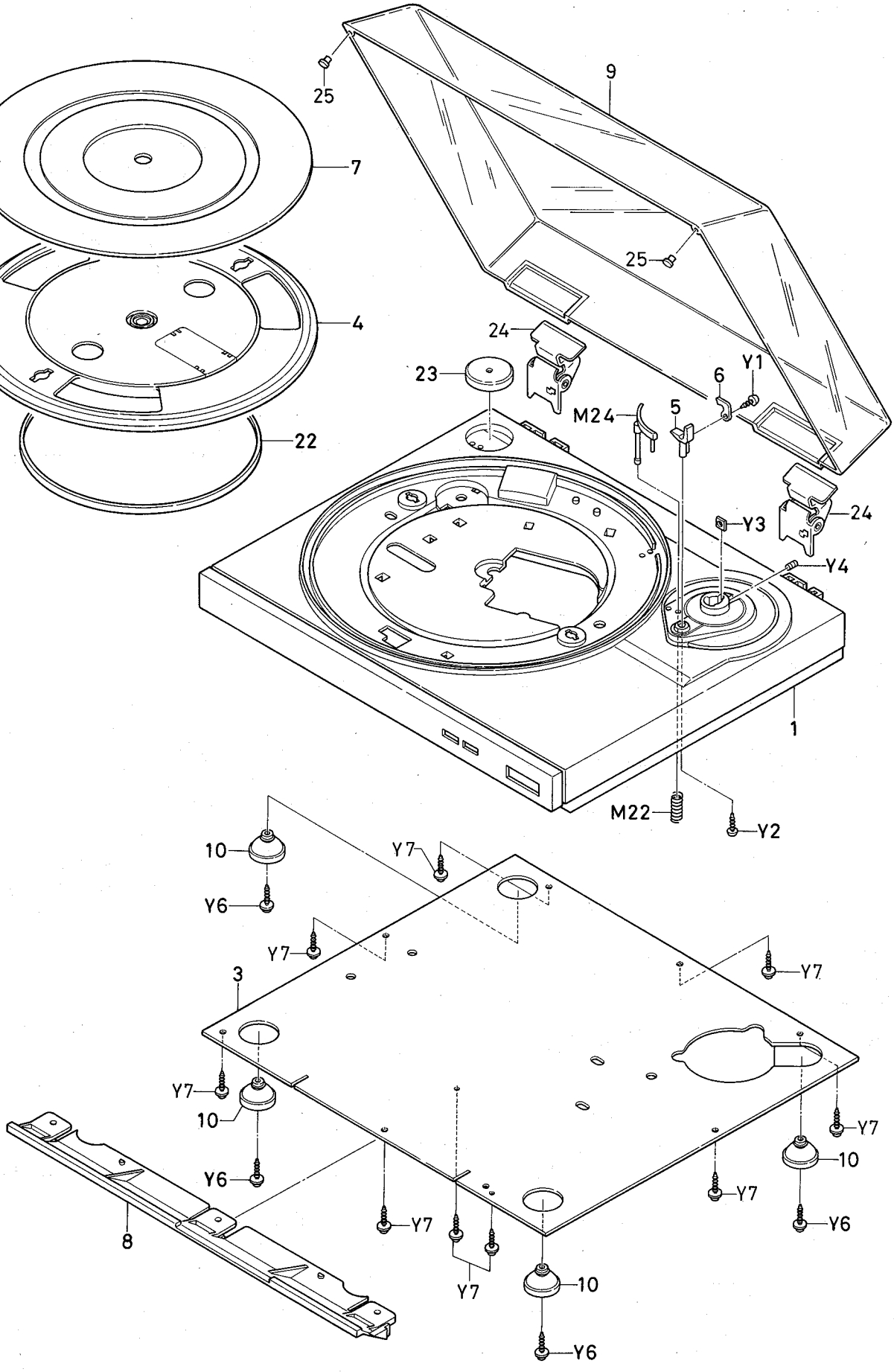








EXPLODED VIEW (CABINET)



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol ⚠ in the parts list and the schematic diagram designate components in which safety can be of special significance. When replacing a component identified with ⚠, use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual.
Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

NOTE:

* Materials of Capacitors and Resistors are abbreviated as follows;

AL ELECT .....Aluminum Electrolytic
BC CON .....Semiconductor Ceramic
CHIP BC .....Chip Semiconductor Ceramic
CHIP TAN .....Chip Tantal
ELECT .....Electrolytic
PP CON .....Polypropylene
MT GLAZE .....Metal Glaze
FP CARBON .....Flameproof Carbon

* Tolerance of Capacitors and Resistors are noted with follow symboles;

J .....±5%
K .....±10%
M .....±20%
N .....±30%
P .....+100−0%
Q .....+30−10%
Z .....+80−20%

This manuals included at 4 models and these models are available in 2 versions.
Versions are (1) . . . .TP477/EUROPE (2) TP475/CANADA
(3) . . . .TP675/CANADA (4) TP877/CANADA
and color is all BLOCK.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	141-6-145T-00200	FOAM PLASTIC CASE, RIGHT SIDE
	141-6-145T-00300	FOAM PLASTIC CASE, LEFT SIDE
	141-6-231T-35400	INNER POLYE COVER, TURN TABLE & RUBBER SHEET
	141-6-235T-70500	INNER POLYE LAMINA COVER, SET
or	141-6-235T-70505	INNER POLYE LAMINA COVER
	141-2-176T-07730	BAND, SLEEVE FIXER 1500MM
	141-6-315T-09900	SLEEVE, SHEET (3)
or	141-6-515T-09901	SLEEVE, SHEET (2)
or	141-6-515T-09902	SLEEVE, SHEET (4)
	141-6-133T-83100	INNER CORR CASE (1)
	141-2-184T-70100	TAPE 18X400MM (1)
	141-6-317T-06700	PAD
	141-6-318T-00901	PAD, RUBBER SHEET
	141-6-317T-81900	PAD, SET
	141-6-318T-17100	PAD, SET (1)
	141-6-409T-35600	INST MANUAL (TP477)
	141-6-409T-36100	INST MANUAL (Included JA675)
	141-6-409T-37400	INST MANUAL (Included JA877)
	141-6-409T-37600	INST MANUAL (Included JA475)

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	141-2-121T-21600	DECK PANEL (2) (3) (4)
or	141-2-121T-21601	DECK PANEL (1)
2	141-2-147T-19200	MARKING PLATE (2) (3) (4)
or	141-2-147T-19201	MARKING PLATE (1)
3	141-2-125T-41900	BOTTOM LID
4	141-2-118T-03400	TURN TABLE
5	141-2-873T-00900	REST, ARM FIXING
6	141-2-873T-00700	REST, ARM MOVING
7	141-2-247T-09601	SHEET, RUBBER
8	141-2-135T-92901	COVER
9	141-0-194T-02400	DUST COVER
10	141-2-174T-11900	STAND (4PC'S) (1)
or	141-2-174T-13800	STAND (4PC'S) (2) (3) (4)
11	141-2-160T-63830	PUSH BUTTON, REJECT
12	141-2-160T-65230	PUSH BUTTON, 33/45RPM
13	141-2-160T-65230	PUSH BUTTON, LIFTER
14	141-2-860T-10800	SPRING WIRE, LIFTER
15	141-2-860T-10900	SPRING WIRE, REJECT
16	141-2-210T-57800	BRACKET, LIFT
17	141-2-855T-84600	SPRING COIL, SW LEVER
18	141-2-855T-87500	SPRING COIL, CUE LEVER RETURN
19	141-2-445T-29002	RUBBER CUSHION, MOTOR FIXER
20	141-2-445T-32900	RUBBER CUSHION, MOTOR COVER
21	141-2-860T-11000	SPRING WIRE, BOTTOM GND.
22	141-2-561T-07200	FLAT BELT, TURN TABLE DRIVE
23	141-2-352T-52500	SPACER, 45RPM ADAPTOR
24	141-2-251T-08600	HINGE, DUST COVER
25	141-2-445T-26600	RUBBER CUSHION
	141-2-447T-46200	CUSHION 15X25X3, WIRE FIXER
	141-2-445T-35201	RUBBER CUSHION 26X20X10, MECHA BRACKET

FIXING PARTS

Ref. No.	Part No.	Description
Y1	BJN2S2R6+6+ZK	PAN HD 2 TAPPING SCREW 2.6X6, REST
Y2	BJN2S2R612+Z1	PAN HD 2 TAPPING SCREW 2.6X12, REST
Y3	NJSNS++4+++Z1	SQUARE NUT 4, ARM FIXING
Y4	BJAMU++4+6+CP	HEX SOCKET HEADLESS SCREW 4X6, ARM
Y5	BJX6S++3+8+Z1	PAN WASHER HD 2 TAPPING SCREW 3X8, SLIDE
Y6	BJX6S++310+Z1	PAN WASHER HD 2 TAPPING SCREW 3X10
Y7	BJX6S++312+Z1	PAN WASHER HD 2 TAPPING SCREW 3X12, BOTTOM LID

PARTS LIST

ELECTRICAL PARTS

Ref. No.	Part No.	Description
31	4-285T-70400	P.C BOARD, OUTPUT RELAY (2) (3) (4)
or	4-285T-70471	P.C BOARD, OUTPUT RELAY (1)
32	4-285T-70500	P.C BOARD, GROUND (2) (3) (4)
or	4-285T-70571	P.C BOARD, GROUND (1)
33	4-236T-20075	PLUG, DC POWER (2) (3) (4)
or	4-243T-84973	POWER CORD (1)
34	4-243T-32671	LEAD CORD, OUTPUT (2) (3) (4)
or	4-243T-39900	LEAD CORD, OUTPUT (1)
35	141-2-464T-43100	FIXER
36	4-231T-61900	SWITCH, POWER (S1)
or	4-238T-88600	SWITCH, POWER (S1)
37	4-527T-28003	COMMUTATE MOTOR ASSY
38	4-300T-96200	P.T (1)
39	4-234T-04001	FUSE 200MA (1)
or	4-234T-10577	FUSE T200MA·250V (1)

MOTOR CONTROL P.C.BOARD ASSY

Ref. No.	Part No.	Description
41	141-4-285T-70200	P.C BOARD ASSY, MOTOR CONTROL (2) (3) (4)
or	141-4-285T-70271	P.C BOARD ASSY, MOTOR CONTROL (1)
	4-240T-83573	SOCKET 3P, DIP
	141-2-381T-04202	BRACKET, FUSE (2PC'S) 5.1MM SMALLTYPE (1)
L901	4-253T-15024	FILTER 22UH
SVR1	4-222T-97582	V.R 300B, 45RPM
SVR2	4-222T-97572	V.R 1KB, 33RPM
IC1	SIUPC1470H+++	IC UPC1470H SIP4
D901-904	SDDSF10+B+++T	DIODE DSF10 B T (1)
C901	CE+16337MVHAS	ELECT 330MF 16V M V HA S
C902	CC+50103ZRZFF	CERAMIC 0.01MF 50V Z R ZF
C903	CC+50223ZRZFF	CERAMIC 0.022MF 50V Z R ZF
C905	CC+50103ZRZFF	CERAMIC 0.01MF 50V Z R ZF
R901	RC/+4391JT++R	CARBON T 390 OHM J1/4WR25
R902	RC/+4222JP++R	CARBON P 2.2KOHM J1/4WR25
or	RC/+4562JP++R	CARBON P 5.6KOHM J1/4WR25
R903	RC/+4151JT++R	CARBON T 150 OHM J1/4WR25
R904	RC/+4101JT++R	CARBON T 100 OHM J1/4WR25

SPEED SELECT P.C.BOARD ASSY

Ref. No.	Part No.	Description
42	141-4-285T-70300	P.C BOARD ASSY, SPEED SELECT (2) (3) (4)
or	141-4-285T-70371	P.C BOARD ASSY, SPEED SELECT (1)
	4-240T-83573	SOCKET 3P DIP
	4-248T-05600	SWITCH, 33/45 SPEED SELECT

PARTS LIST & EXPLODED VIEW (ARM)

MECHANISM

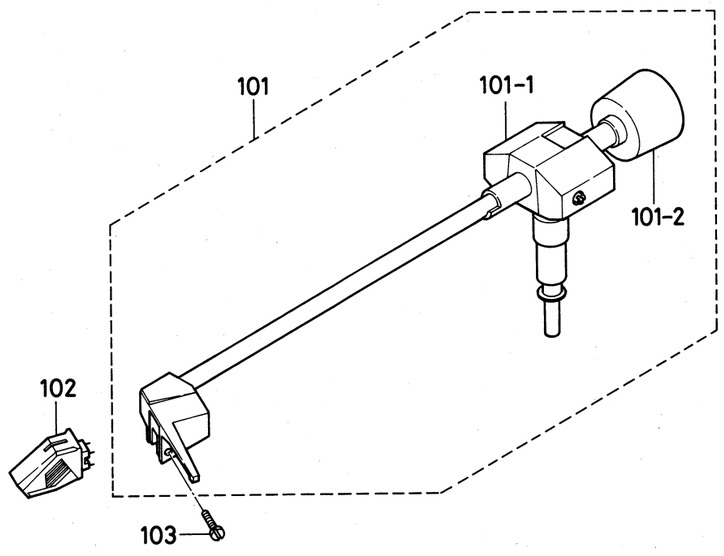
Ref. No.	Part No.	Description
M1	141-0-351T-54801	BRACKET M.T.G ASSY
M2	141-0-754T-89400	SHAFT ASSY
M3	141-2-345T-01100	STEEL BALL 4MM
M4	141-2-581T-21600	GEAR, MAIN
M5	141-0-742T-88400	LEVER ASSY, LOWER TRIPMENT
M6	141-2-742T-68700	LEVER, BRACKET (M1)
M7	141-0-731T-92600	SLIDE ASSY, MAIN
M8	141-2-461T-42800	PIPE, LEVER (M5,M13) MTG.
M9	141-2-856T-12400	SPRING COIL, SLIDE (M7) TENSION
M10	141-2-210T-32700	BRACKET
M11	141-2-742T-68400	LEVER, BRACKET (M10) MTG.
M12	141-2-852T-94701	SPRING WIRE, LEVER (M11) MTG.
M13	141-2-742T-68500	LEVER, ENGAGEMENT
M14	141-2-740T-40800	LEVER, TRIP
M15	141-2-742T-69200	LEVER, ARM
M16	141-2-754T-06800	SHAFT, AUTO RETURN ADJUSTMENT
M17	141-2-856T-41300	SPRING COIL, CANCELAR
M18	141-2-742T-69101	LEVER, ARM
M19	141-2-453T-33700	WASHER 4.5X7X0.25, ECCENTRIC SHAFT
M20	141-2-742T-68800	LEVER, CUE
M21	141-2-855T-51600	SPRING COIL, RETURN LEVER
M22	141-2-855T-81600	SPRING COIL, LIFT
M23	141-2-742T-68900	LEVER, SWITCH
M24	141-0-872T-00730	LIFTER ASSY
M25	141-2-852T-93000	SPRING WIRE, LEVER (M6)

FIXING PARTS (MECHANISM)

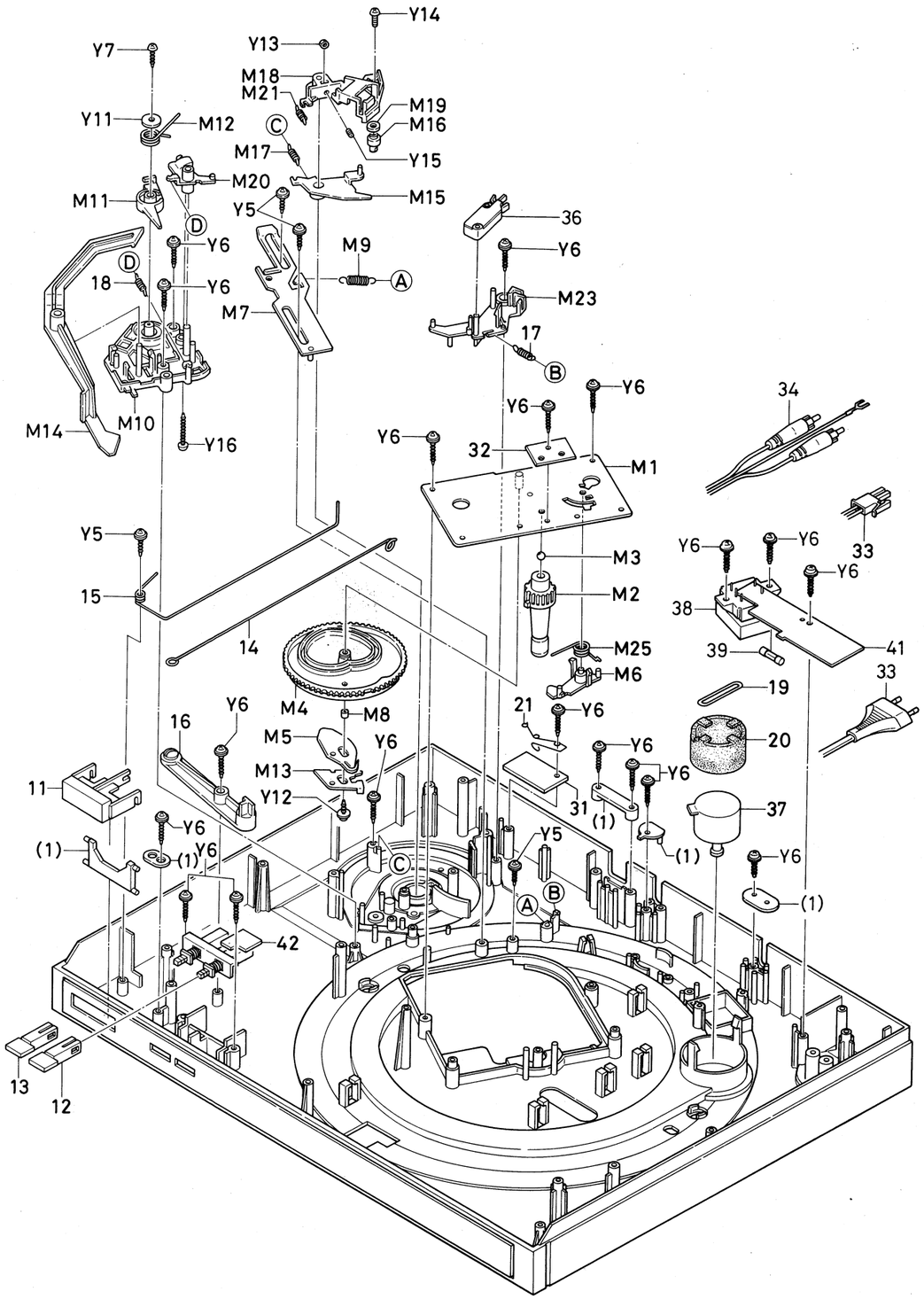
Ref. No.	Part No.	Description
Y11	WJBWS++3T10Z1	WASHER 3X13X1T
Y12	BJX6S2R6+8+Z1	PAN WASHER HD 2 TAPPING SCREW 2.6X8
Y13	NJR3S++4+++Z1	HEX NUT 3 4
Y14	BJTTS++3+6+Z1	BIND HD FORMING SCREW 3X6
Y15	BJAMU++4+6+CP	HEX SOCKET HEADLESS SCREW 4X6
Y16	BJN2S++318+Z1	PAN HD 2 TAPPING SCREW 3X18
Y17	BJN2S++3+8+Z1	PAN HD 2 TAPPING SCREW 3X8

ARM ASSY

Ref. No.	Part No.	Description
101	141-0-743T-11100	ARM ASSY
101-1	141-2-743T-11100	ARM
101-2	141-2-687T-03200	WEIGHT
102	4-157T-04101	CARTRIDGE ASSY
102-1	4-157T-04100	CARTRIDGE
102-2	4-156T-03600	NEEDLE CARTRIDGE
102-3	141-2-135T-89500	COVER
103	141-2-421T-54800	SPECIAL SCREW

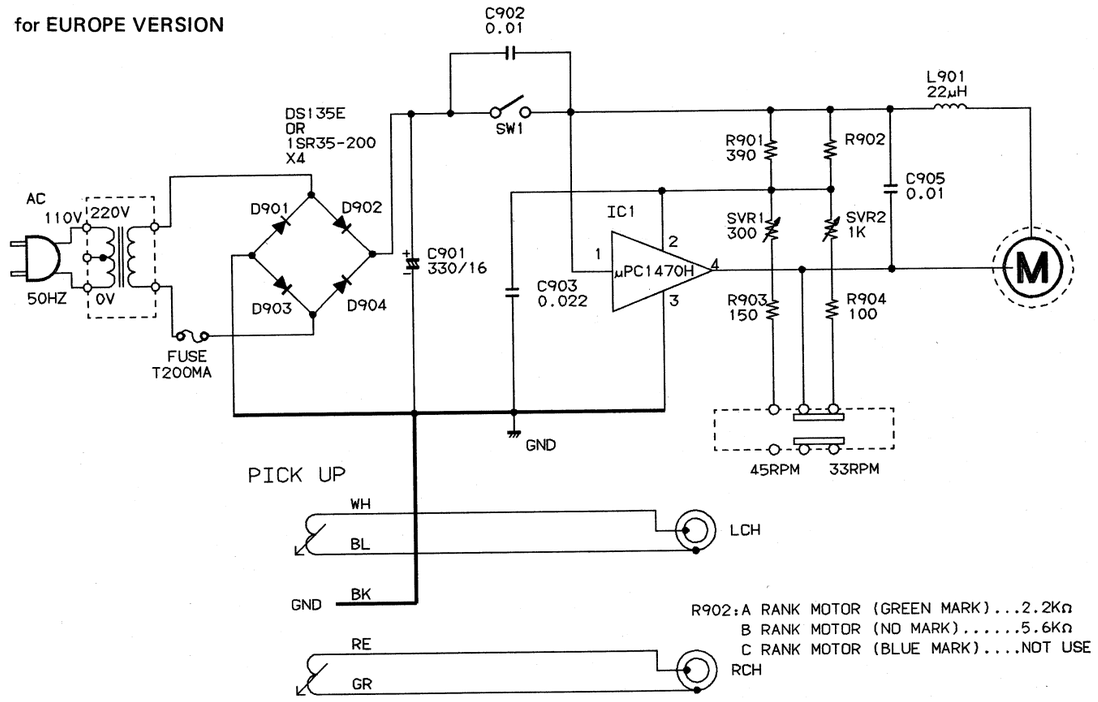


EXPLODED VIEW (MECHANISM)

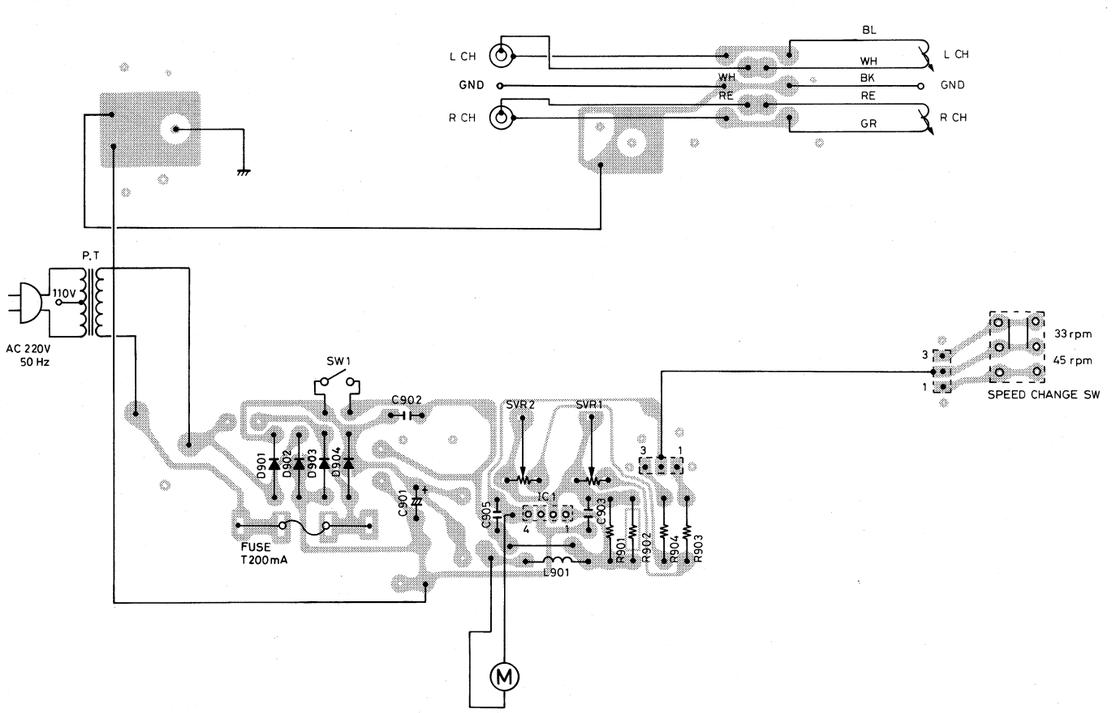


SCHEMATIC DIAGRAM

for EUROPE VERSION

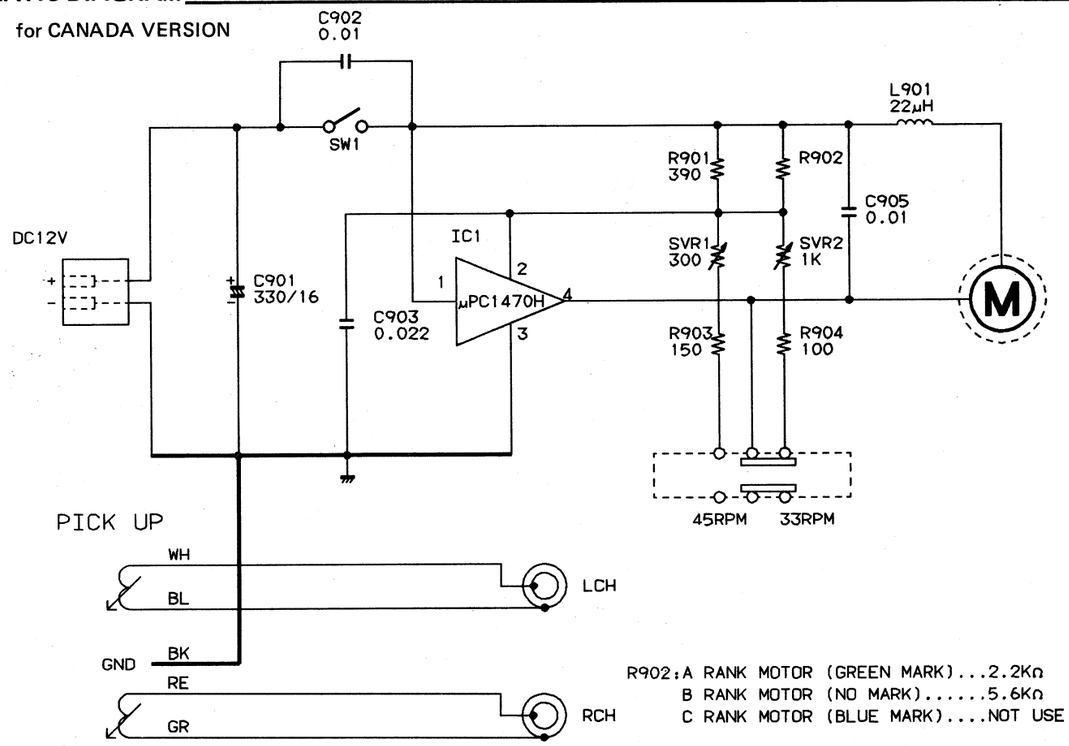


WIRING DIAGRAM

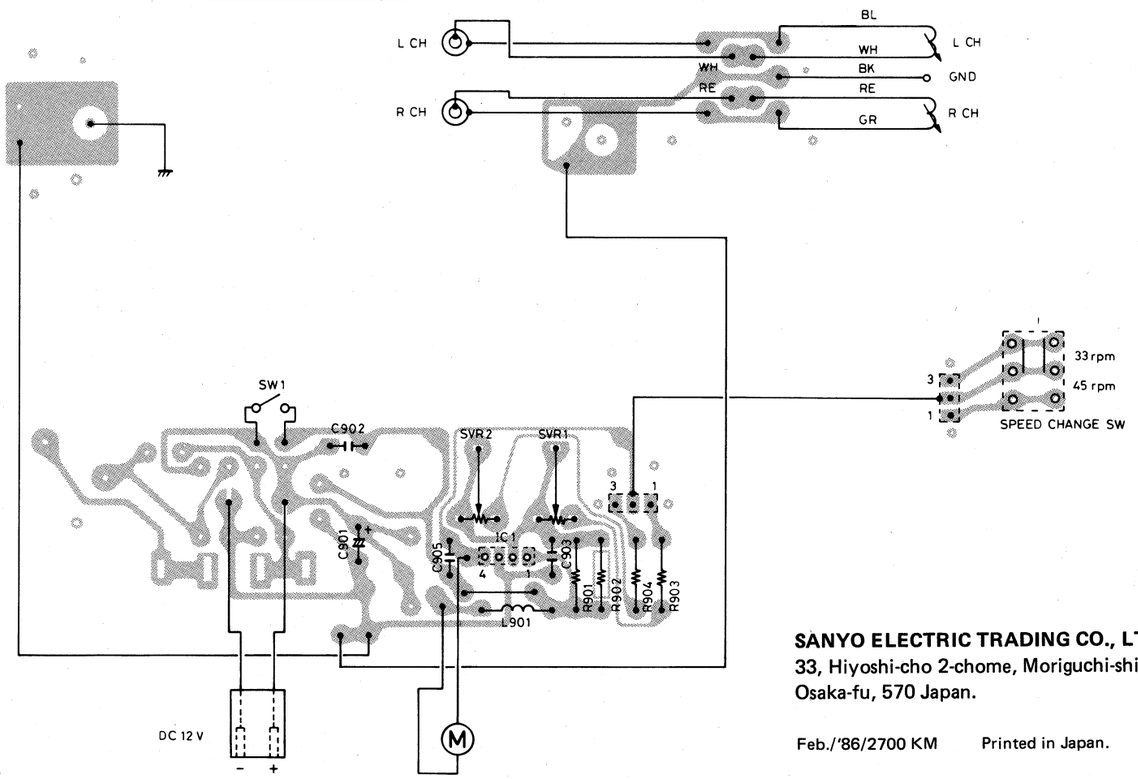


SCHEMATIC DIAGRAM

for CANADA VERSION



WIRING DIAGRAM



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